

Authority to Construct/Permit to Operate 13487

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EQUIPMENT OWNER:

ExxonMobil Production Company

200216

EQUIPMENT OPERATOR:

ExxonMobil Production Company

EQUIPMENT LOCATION:

12000 Calle Real, Goleta

STATIONARY SOURCE/FACILITY:

Exxon - SYU Project SSID: 01482 Las Flores Canyon FID: 01482

AUTHORIZED MODIFICATION:

This permit incorporates existing fugitive emission component leak paths, currently categorized as deminimis at the Las Flores Canyon facility, into the total permitted fugitive component leak path inventory. The emissions associated with this permit are required to be offset.

EQUIPMENT DESCRIPTION:

The equipment subject to this permit is listed in the table at the end of this permit.

PROJECT/PROCESS DESCRIPTION:

The Las Flores Canyon facility is part of the SYU Project which develops production from three platforms (Platforms Hondo, Harmony and Heritage) located offshore California in the Santa Barbara Channel. The production is transported to shore through a subsea pipeline and treated in production facilities located in Las Flores Canyon.

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CONDITIONS:

9.A Standard Administrative Conditions

The following federally enforceable administrative permit conditions apply to Las Flores Canyon. In the case of a discrepancy between the wording of a condition and the applicable District rule, the wording of the rule shall control.

- A.1 **Condition Acceptance.** Acceptance of this operating permit by ExxonMobil shall be considered as acceptance of all terms, conditions, and limits of this permit. [*Re: ATC 5651, PTO 5651*]
- A.2 **Grounds for Revocation.** Failure to abide by and faithfully comply with this permit or any Rule, Order, or Regulation may constitute grounds for revocation pursuant to California Health & Safety Code Section 42307 *et seq.* [*Re: ATC 5651, PTO 5651*]
- A.3 **Defense of Permit.** ExxonMobil agrees, as a condition of the issuance and use of this permit, to defend at its sole expense any action brought against the District because of issuance of this permit. ExxonMobil shall reimburse the District for any and all costs including, but not limited to, court costs and attorney's fees which the District may be required by a court to pay as a result of such action. The District may, at its sole discretion, participate in the defense of any such action, but such participation shall not relieve ExxonMobil of its obligation under this condition. The District shall bear its own expenses for its participation in the action. [*Re: ATC 5651*, *PTO 5651*]
- A.4 **Reimbursement of Costs**. All reasonable expenses, as defined in District Rule 210, incurred by the District, District contractors, and legal counsel for all activities that follow the issuance of this permit, including but not limited to permit condition implementation, compliance verification and emergency response, directly and necessarily related to enforcement of the permit shall be reimbursed by ExxonMobil as required by Rule 210. [*Re: ATC 5651, PTO 5651*]
- A.5 **Access to Records and Facilities.** As to any condition that requires for its effective enforcement the inspection of records or facilities by the District or its agents, ExxonMobil shall make such records available or provide access to such facilities upon notice from the District. Access shall mean access consistent with California Health and Safety Code Section 41510 and Clean Air Act Section 114A. [*Re: ATC 5651, PTO 5651*]
- A.6 **Conflicts Between Conditions.** In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the condition most protective of air quality and public health and safety shall prevail to the extent feasible. [*Re: ATC 5651, PTO 5651*]

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- A.7 **Compliance.** Nothing contained within this permit shall be construed to allow the violation of any local, State or Federal rule, regulation, ambient air quality standard or air quality increment. [Re: ATC 5651, PTO 5651]
- A.8 **Consistency with Analysis.** Operation under this permit shall be conducted consistent with all data, specifications and assumptions included with the application and supplements thereof (as documented in the District's project file) and the District's analyses under which this permit is issued as documented in the Permit Analyses prepared for and issued with the permit. [*Re: ATC 5651, PTO 5651*]
- A.9 **Consistency with State and Local Permits.** Nothing in this permit shall relax any air pollution control requirement imposed on the Santa Ynez Unit Project by:
 - (a) the County of Santa Barbara in Final Development Plan Permit 87-DP-32cz and any subsequent modifications; and,
 - (b) the California Coastal Commission in the consistency determination for the Project with the California Coastal Act. [Re: ATC 5651, PTO 5651]

A.10 Compliance with Permit Conditions.

- (a) The permittee shall comply with all permit conditions in Sections 9.A, 9.B and 9.C.
- (b) This permit does not convey property rights or exclusive privilege of any sort.
- (c) Any permit noncompliance with sections 9.A, 9.B, or 9.C constitutes a violation of the Clean Air Act and is grounds for enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.
- (d) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (e) A pending permit action or notification of anticipated noncompliance does not stay any permit condition.
- (f) Within a reasonable time period, the permittee shall furnish any information requested by the Control Officer, in writing, for the purpose of determining:
 - (i) compliance with the permit, or
 - (ii) whether or not cause exists to modify, revoke and reissue, or terminate a permit or for an enforcement action.
- (g) In the event that any condition herein is determined to be in conflict with any other condition contained herein, then, if principles of law do not provide to the contrary, the

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condition most protective of air quality and public health and safety shall prevail to the extent feasible. [Re: 40 CFR Part 70.6.(a)(6), District Rules 1303.D.1]

A.11 **Emergency Provisions.** The permittee shall comply with the requirements of the District, Rule 505 (Upset/Breakdown rule) and/or District Rule 1303.F, whichever is applicable to the emergency situation. In order to maintain an affirmative defense under Rule 1303.F, the permittee shall provide the District, in writing, a "notice of emergency" within two (2) working days of the emergency. The "notice of emergency" shall contain the information/documentation listed in Sections (1) through (5) of Rule 1303.F. [*Re: 40 CFR 70.6(g), District Rule 1303.F*]

A.12 Compliance Plans.

- (a) The permittee shall comply with all federally enforceable requirements that become applicable during the permit term in a timely manner.
- (b) For all applicable equipment, the permittee shall implement and comply with any specific compliance plan required under any federally-enforceable rules or standards.

[Re: District Rule 1302.D.2]

- A.13 **Right of Entry.** The Regional Administrator of USEPA, the Control Officer, or their authorized representatives, upon the presentation of credentials, shall be permitted to enter upon the premises where a Part 70 Source is located or where records must be kept:
 - (a) To inspect the stationary source, including monitoring and control equipment, work practices, operations, and emission-related activity;
 - (b) To inspect and duplicate, at reasonable times, records required by this Permit to Operate;
 - (c) To sample substances or monitor emissions from the source or assess other parameters to assure compliance with the permit or applicable requirements, at reasonable times.

 Monitoring of emissions can include source testing. [Re: District Rule 1303.D.2]
- A.14 **Severability.** The provisions of this Permit to Operate are severable and if any provision of this Permit to Operate is held invalid, the remainder of this Permit to Operate shall not be affected thereby. [*Re: District Rules 103 and 1303.D.1*]
- A.15 **Permit Life.** The Part 70 permit shall become invalid three years from the date of issuance unless a timely and complete renewal application is submitted to the District. Any operation of the source to which this Part 70 permit is issued beyond the expiration date of this Part 70 permit and without a valid Part 70 operating permit (or a complete Part 70 permit renewal application) shall be a violation of the CAAA, § 502(a) and 503(d) and of the District rules.

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The permittee shall apply for renewal of the Part 70 permit no later than 6 months before the date of the permit expiration. Upon submittal of a timely and complete renewal application, the Part 70 permit shall remain in effect until the Control Officer issues or denies the renewal application. [Re: District Rule 1304.D.1]

- A.16 **Payment of Fees.** The permittee shall reimburse the District for all its Part 70 permit processing and compliance expenses for the stationary source on a timely basis. Failure to reimburse on a timely basis shall be a violation of this permit and of applicable requirements and can result in forfeiture of the Part 70 permit. Operation without a Part 70 permit subjects the source to potential enforcement action by the District and the USEPA pursuant to section 502(a) of the Clean Air Act. [*Re: District Rules 1303.D.1 and 1304.D.11, 40 CFR 70.6(a)(7)*]
- A.17 **Prompt Reporting of Deviations.** The permittee shall submit a written report to the District documenting each and every deviation from the requirements of this permit or any applicable federal requirements within seven (7) days after discovery of the violation, but not later than 6 months after the date of occurrence. The report shall clearly document 1) the probable cause and extent of the deviation 2) equipment involved, 3) the quantity of excess pollutant emissions, if any, and 4) actions taken to correct the deviation. The requirements of this condition shall not apply to deviations reported to District in accordance with Rule 505. Breakdown Conditions, or Rule 1303.F Emergency Provisions. [District Rule 1303.D.1, 40 CFR 70.6(a) (3)]
- A.18 **Reporting Requirements/Compliance Certification.** The permittee shall submit compliance certification reports to the USEPA and the Control Officer every six months. These reports shall be submitted on District approved forms and shall identify each applicable requirement/condition of the permit, the compliance status with each requirement/condition, the monitoring methods used to determine compliance, whether the compliance was continuous or intermittent, and include detailed information on the occurrence and correction of any deviations from permit requirement. The reporting periods shall be each half of the calendar year, e.g., January through June for the first half of the year. These reports shall be submitted by September 1st and March 1st, respectively, each year. Supporting monitoring data shall be submitted in accordance with the "Semi-Annual Compliance Verification Report" condition in Section 9.C. The permittee shall include a written statement from the responsible official, which certifies the truth, accuracy, and completeness of the reports. [*Re: District Rules 1303.D.1, 1302.D.3, 1303.2.c*]
- A.19 **Federally Enforceable Conditions.** Each federally enforceable condition in this permit shall be enforceable by the USEPA and members of the public. None of the conditions in the District-only enforceable section of this permit are federally enforceable or subject to the public/USEPA review. [*Re: CAAA § 502(b)(6), 40 CFR 70.6(b)*]
- A.20 **Recordkeeping Requirements**. The permittee shall maintain records of required monitoring information that include the following:
 - (a) The date, place as defined in the permit, and time of sampling or measurements;

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- (b) The date(s) analyses were performed;
- (c) The company or entity that performed the analyses;
- (d) The analytical techniques or methods used;
- (e) The results of such analyses; and
- (f) The operating conditions as existing at the time of sampling or measurement;

The records (electronic or hard copy), as well as all supporting information including calibration and maintenance records, shall be maintained for a minimum of five (5) years from date of initial entry by the permittee and shall be made available to the District upon request. [Re: District Rule 1303.D.1.f, 40 CFR 70.6(a)(3)]

- A.21 **Conditions for Permit Reopening.** The permit shall be reopened and revised for cause under any of the following circumstances:
 - (a) Additional Requirements: If additional applicable requirements (e.g., NSPS or MACT) become applicable to the source which has an unexpired permit term of three (3) or more years, the permit shall be reopened. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. However, no such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended. All such re-openings shall be initiated only after a 30 day notice of intent to reopen the permit has been provided to the permittee, except that a shorter notice may be given in case of an emergency.
 - (b) <u>Inaccurate Permit Provisions</u>: If the District or the USEPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit, the permit shall be reopened. Such re-openings shall be made as soon as practicable.
 - (c) <u>Applicable Requirement</u>: If the District or the USEPA determines that the permit must be revised or revoked to assure compliance with any applicable requirement including a federally enforceable requirement, the permit shall be reopened. Such re-openings shall be made as soon as practicable.

Administrative procedures to reopen a permit shall follow the same procedures as apply to initial permit issuance. Re-openings shall affect only those parts of the permit for which cause to reopen exists.

If a permit is reopened, the expiration date does not change. Thus, if the permit is reopened, and revised, then it will be reissued with the expiration date applicable to the re-opened permit. [Re: 40 CFR 70.7(f), 40 CFR 70.6(a)]

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- A.22 **Permit Shield.** The rules and regulations listed in Table 1.1 of this permit have been specifically identified as non-applicable to the Las Flores Canyon facility. This shield shall remain in effect until expiration of this permit or re-opening and re-issuance of this permit. [Re: 40 CFR 70.6(f), District Rule 1303.E.4]
- A.23 **Credible Evidence.** Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding. [Re: 40 CFR 52.12(c)]
- A.24 **Risk Management Plan Section 112r.** ExxonMobil shall comply with the requirements of 40 CFR 68 on chemical accident prevention provisions. The annual compliance certification must include a statement regarding compliance with this part, including the registration and submission of the risk management plan (RMP). [*Re: 40 CFR 68*]

9.B. Generic Conditions

The generic conditions listed below apply to all emission units, regardless of their category or emission rates. These conditions are federally enforceable. In the case of a discrepancy between the wording of a condition and the applicable District rule, the wording of the rule shall control.

- B.1 **Circumvention (Rule 301).** A person shall not build, erect, install, or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Division 26 (Air Resources) of the Health and Safety Code of the State of California or of these Rules and Regulations. This Rule shall not apply to cases in which the only violation involved is of Section 41700 of the Health and Safety Code of the State of California, or of District Rule 303. [*Re: District Rule 301*]
- B.2 **Visible Emissions (Rule 302).** ExxonMobil shall not discharge into the atmosphere from any single source of emission any air contaminants for a period or periods aggregating more than three minutes in any one hour which is:
 - (a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
 - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subsection B.2.(a) above.
 - (c) ExxonMobil shall determine compliance with the requirements of this Condition/Rule and Condition C.49. [Re: District Rule 302]

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- B.3 **Nuisance** (**Rule 303**). No pollutant emissions from any source at ExxonMobil shall create nuisance conditions. No operations shall endanger health, safety or comfort, nor shall they damage any property or business. [*Re: District Rule 303*]
- B.4 **PM Concentration South Zone** (**Rule 305**). ExxonMobil shall not discharge into the atmosphere, from any source, particulate matter in excess of the concentrations listed in Table 305(a) of Rule 305. [*Re: District Rule 305*]
- B.5 **Specific Contaminants (Rule 309).** ExxonMobil shall not discharge into the atmosphere from any single source sulfur compounds, hydrogen sulfide, combustion contaminants and carbon monoxide in excess of the standards listed in Sections A, B and G of Rule 309. ExxonMobil shall not discharge into the atmosphere from any fuel burning equipment unit, sulfur compounds, nitrogen oxides or combustion contaminants in excess of the standards listed in Section E and F of Rule 309. [*Re: District Rule 309*]
- 9.C Requirements and Equipment Specific Conditions

This section contains non-generic federally-enforceable conditions, including emissions and operations limits, monitoring, recordkeeping, and reporting for each specific equipment group. This section may also contain other non-generic conditions. Permit condition 9.C.3 supersedes permit condition 9.C.3 of PTO 5651-R4 and condition 9.C.14 modifies permit condition 9.C.14 of PTO 5651-R4. All remaining permit conditions of Pt70 PTO 5651-R4 remain in full force and effect.

C.3 **Fugitive Hydrocarbon Emissions Components.** The following equipment are included in this emissions unit category:

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Device Type	Device Subtype	APCD DeviceNo
Fugitive Components - Gas		
Valve	Accessible	1097
Valve	Inaccessible	1098
Valve	Unsafe	7870
Valve	Bellows / Background	6551
Valve	Category A	6474
Valve	Category B	7872
Valve	Category C	104929
Valve	Category E	104926
Valve	Category F	9710
Valve	Category H	1099
Valve	Category H (Inaccessi	1100
Valve	Category I	6475
Connection	Accessible/Inaccessib	1101
Connection	Unsafe	6568
Connection	Category B	7874
Connection	Category C	104928
Connection	Category E	104925
Connection	Category F	9709
Compressor Seal	To VRS	6555
	Exempt	6557

Device Type	Device Subtype	APCD DeviceNo
Fugitive Co	mponents - Oil	
Valve	Accessible	1092/113957
Valve	Inaccessible	1093
Valve	Bellows / Background ppmv	6558
Valve	Category B	7877
Valve	Category H	1094
Valve	Category H (Inaccessible)	5967
Connection	Accessible/Inaccessible	1095/113958
Connection	Unsafe	7880
Connection	Category B	1096
Connection	Category F	9711
Pump Seal	Single	7879
Pump Seal	Dual/Tandem	6561
	Exempt	6563

- (a) Emission Limits: Mass emissions from the gas service (sub-total) and oil service (sub-total) components listed above shall not exceed the limits listed in Tables 5.3 and 5.4. Compliance with this condition shall be based on actual component-leakpath counts as documented through the monitoring, recordkeeping and reporting conditions in this permit.
- (b) Operational Limits: Operation of the equipment listed in this section shall conform to the requirements listed in District Rule 331.D and E. Compliance with these limits shall be assessed through compliance with the monitoring, recordkeeping and reporting conditions in this permit. In addition ExxonMobil shall meet the following requirements:
 - (i) VRS Use The vapor recovery and gas collection (VR & GC) systems at LFC shall be in operation when equipment connected to these systems are in use. These systems include piping, valves, and flanges associated with the VR & GC systems. The VR & GC systems shall be maintained and operated to minimize the release of emissions from all systems, including pressure relief valves and gauge hatches.
 - (ii) *I&M Program* The District-approved I&M Plan for ExxonMobil LFC (*Fugitive Emissions Inspection and Maintenance Program for Las Flores Canyon Process Facilities*) shall be implemented for the life of the project. The Plan, and any

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- subsequent District approved revisions, is incorporated by reference as an enforceable part of this permit.
- (iii) Leakpath Count The total component-leakpath count listed in ExxonMobil's most recent I&M component-leakpath inventory shall not exceed the total component-leakpath count listed in Table 5.1 by more than five percent. This five percent range is to allow for minor differences due to component counting methods and does not constitute allowable emissions growth due to the addition of new equipment.
- (iv) *Venting* All routine venting of hydrocarbons shall be routed to either the gas plant, flare header, or other District-approved control device.
- (v) *NSPS KKK* For all permitted and future component-leakpaths in hydrocarbon service, ExxonMobil shall comply with the emission standard requirements of 40 CFR 60.632, as applicable.
- (vi) Category A Requirements. Component-leakpaths monitored monthly at less than 1,000 ppmv shall achieve a mass emission control efficiency of 84 percent. Category A component-leakpaths also include components subject to enhanced fugitive inspection and maintenance programs for which screening values are also maintained at or below 1,000 ppmv as methane, monitored per EPA Reference Method 21. For Category A components, screening values above 1,000 ppmv shall trigger the Rule 331 repair process per the minor leak schedule.
- (vii) Category B Requirements. Component-leakpaths monitored quarterly at less than 500 ppmv shall achieve a mass emission control efficiency of 85 percent. Category B component-leakpaths are defined as component-leakpaths associated with closed vent systems (e.g., vapor recovery systems, and Subpart Kb and Subpart HH vessels) for which screening values are maintained at or below 500 ppmv as methane, monitored per EPA Reference Method 21. Category B component-leakpaths also include components subject to enhanced fugitive inspection and maintenance programs for which screening values are also maintained at or below 500 ppmv as methane, monitored per EPA Reference Method 21. For Category B components, screening values above 500 ppmv shall trigger the Rule 331 repair process per the minor leak schedule.
- (viii) Category C Requirements. Component-leakpaths monitored quarterly at less than 100 ppmv shall achieve a mass emission control efficiency of 87 percent. Category C component-leakpaths are defined as component-leakpaths subject to enhanced fugitive inspection and maintenance programs for which screening values are maintained at or below 100 ppmv as methane, monitored per EPA Reference Method 21. For Category C components, screening values above 100 ppmv shall trigger the Rule 331 repair process per the minor leak schedule.

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- (ix) Category E Requirements. Component-leakpaths monitored monthly at less than 100 ppmv shall achieve a mass emission control efficiency of 88 percent. Category E component-leakpaths are defined as component-leakpaths subject to enhanced fugitive inspection and maintenance programs for which screening values are also maintained at or below 100 ppmv as methane, monitored per EPA Reference Method 21. For Category E components, screening values above 100 ppmv shall trigger the Rule 331 repair process per the minor leak schedule.
- (x) Category H Requirements. Low emitting design component-leakpaths monitored quarterly at less than 1,000 ppmv shall achieve a mass emission control efficiency of 90 percent. Category H component-leakpaths are subject to Rule 331 for which screening values are maintained at or below 1,000 ppmv as methane, monitored per EPA Reference Method 21. For Category H components, screening values above 1,000 ppmv shall trigger the Rule 331 repair process per the minor leak schedule.
- (xi) Category I Requirements. Low emitting design component -leakpaths monitored monthly at less than 1,000 ppmv shall achieve a mass emission control efficiency of 92 percent. Category I component-leakpaths are subject to Rule 331 and an enhanced fugitive inspection and maintenance program for which screening values are maintained at or below 1,000 ppmv as methane, monitored per EPA Reference Method 21. For Category I components, screening values above 1,000 ppmv shall trigger the Rule 331 repair process per the minor leak schedule.
- (xii) BACT ExxonMobil shall apply BACT, as defined in Tables 4.3 and 4.4 of PTO 5651-R4, to all component- leakpaths in hydrocarbon service for the life of the project. This requirement applies to components subject to the *de minimis* exemption of Rule 202 as well as projects that do not trigger the BACT threshold of Rule 802 and equivalent routine replacements.
- (c) <u>Monitoring</u>: The equipment listed in this section are subject to all the monitoring requirements listed in District Rule 331.F and NSPS Subpart KKK (as applicable). The test methods in Rule 331.H and NSPS Subpart KKK shall be used, when applicable. In addition, ExxonMobil shall:
 - (i) ERC Certificate No. 0004-0103 Perform monthly monitoring on 217 standard (i.e., non-bellows seal and non-low emissions) valves and a minimum of 170 low-emissions packing valves in order to generate the 0.18 tpq of ROC ERCs for ERC Certificate No. 0004-0103. These valves are listed in a separate table in ExxonMobil's I&M Plan. ExxonMobil shall replace any valve on the list with a replacement if the valve is no longer in hydrocarbon service. The District shall be notified, in writing, of all such replacements within ninety (90) days after the replacement. The notification shall include complete equipment description

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information equivalent to the table in ExxonMobil's District approved I&M Plan and the reason for the replacement. Subsequent I&M records and reports shall include the replacement valve(s).

- (ii) ERCs for Platforms Harmony and Heritage Compressor Projects ExxonMobil shall perform monthly monitoring on a minimum of 400 standard (i.e., non-bellows seal and non-low emissions) valves and a minimum of 265 low-emissions packing valves in order to generate 0.39 tpq of ROC ERCs required for projects permitted by PTO 9634 and PTO 9640. These valves are listed in a separate table in ExxonMobil's I&M Plan. ExxonMobil shall replace any valve on the list with a replacement if the valve is no longer in hydrocarbon service. The District shall be notified, in writing, of all such replacements within ninety (90) days after the replacement. The notification shall include complete equipment description information equivalent to the table in ExxonMobil's District approved I&M Plan and the reason for the replacement. Subsequent I&M records and reports shall include the replacement valve(s).
- (iii) ERCs for Platform Heritage Low/Intermediate Pressure and High Pressure Projects - ExxonMobil shall perform monthly monitoring on a minimum of 82 standard (i.e., non-bellows seal and non-low emissions) valves and a minimum of 264 standard flanges/connections at 100 ppmv leak detection threshold. ExxonMobil shall perform quarterly monitoring on a minimum of 77 standard (i.e., non-bellows seal and non-low emissions) valves and a minimum of 185 standard flanges/connections at 100 ppmv leak detection threshold. These monitoring requirements must be fulfilled in order to generate 0.1977 tpq of ROC ERCs of the total required for projects permitted by ATC 11132 Mod-01. These components will be listed in a separate table in ExxonMobil's I&M Plan. ExxonMobil shall replace any component on the list with a replacement if the component is no longer in hydrocarbon service. The District shall be notified, in writing, of all such replacements within ninety (90) days after the replacement. The notification shall include complete equipment description information equivalent to the table in ExxonMobil's District approved I&M Plan and the reason for the replacement. Subsequent I&M records and reports shall include the replacement component(s).
- (d) <u>Recordkeeping</u>: The equipment listed in this section are subject to all the recordkeeping requirements listed in District Rule 331.G and NSPS Subpart KKK, as applicable. In addition, ExxonMobil shall:
 - (i) *I&M Log* ExxonMobil shall record in a log the following: a record of leaking components found (including name, location, type of component, date of leak detection, the ppmv or drop-per-minute reading, date of repair attempts, method of detection, date of re-inspection and ppmv or drop-per-minute reading following repair); a record of the total components inspected and the total number and

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percentage found leaking by component type; a record of leaks from critical components; a record of leaks from components that incur five repair actions within a continuous 12-month period; and, a record of component repair actions including dates of component re-inspections. For the purpose of this paragraph, a leaking component is any component which exceeds the applicable limit:

- (1) greater than 1,000 ppmv for minor leaks under Rule 331 (includes Accessible/Inaccessible components, Category A, Category H, and Category I components);
- (2) greater than 100 ppmv for components subject to current BACT (includes Bellows, Category F and Category G)
- greater than 100 ppmv for components subject to enhanced fugitive inspection and maintenance programs (Category C and Category E)
- greater than 500 ppmv for components subject to enhanced fugitive inspection and maintenance programs (Category B and Category D)
- (ii) For components installed as BACT, as approved by the District, maintain as a separate and identifiable part of the I&M Log records which include: tag number, component type, plant/P&ID, leak ppm, leak detect date, BACT installation date, reinspect date, Exxon request date, District approval date, BACT 45-day due date, BACT Type/Review Status, and District inspection date.
- (iii) For valves and flanges/connections monitored monthly per DOI 002, and ATC 9651-01, maintain as a separate and identifiable part of the I&M Log records that the Category I valves were monitored monthly at 1,000 ppmv detection limit.
- (iv) For valves and flanges/connections monitored monthly per DOI 0034 maintain as a separate and identifiable part of the I&M Log records that the Category E valves and flanges/connections were monitored monthly at 100 ppmv detection limit.
- (v) For valves and flanges/connections monitored monthly or quarterly per DOI 0040 maintain as a separate and identifiable part of the I&M Log records that the Category E and Category C valves and flanges/connections were monitored at the appropriate frequency (monthly or quarterly) at 100 ppmv detection limit.
- (e) Reporting: The equipment listed in this section are subject to all the reporting requirements listed in District Rule 331.G and NSPS KKK, as applicable. ExxonMobil shall provide an updated fugitive hydrocarbon component inventory due to changes in the component list within one calendar quarter of any change, per Rule 331.I. On a semi-annual basis, a report detailing the previous six month's activities shall be provided to the District. The report must list all data required by the *Compliance Verification Reports* condition of PTO 5651-R4. [Re: ATC 5651, PTO 5651, ATC/PTO 11170, ATC/PTO

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- C.14. **Offsets and Consistency with the AQAP.** ExxonMobil shall comply with all the procedures and requirements specified in Section 7 of PTO 5651-R4 including all requirements for offsets, source testing and reporting. ExxonMobil shall provide the following offsets:
 - (a) ExxonMobil shall offset the net emission increase (NEI) listed in Table 7.2. Table 7.2 of this permit supersedes Table 7.2 of ATC 13545.
 - (b) ExxonMobil shall offset the net emission increase (NEI) from the operation of the Las Flores Canyon facility as detailed in Section 7 and Tables 7.1, 7.3 and 7.4 of Pt 70-Reeval 5651-R4.
 - (c) In order to mitigate potential ozone impacts from the Santa Ynez Unit Expansion Project and for consistency with reasonable further progress for attainment of the federal ozone standard and FDP Condition XII-3.b, ExxonMobil shall mitigate all operation phase emissions, which are shown in Table 7.5, and as specified in Section 7.0 of this permit. Through the implementation of the procedures specified above, the District is able to make the finding that the project will result in a net air quality benefit and is consistent with the AQAP, as necessary for the issuance of this permit.
 - (d) Notwithstanding any force majeure, termination, or transfer provision contained in the agreements referenced above, ExxonMobil will offset all SYU project emissions at the ratios specified in Section 7. If offsets are not in place as required by this permit, ExxonMobil shall provide replacement offsets and shall obtain variance relief. [Re: ATC 5651, PTO 5651]

9.D Requirements and Equipment Specific Conditions

The following section lists permit conditions that are not federally enforceable (i.e., not enforceable by the USEPA or the public). However, these conditions are enforceable by the District and the State of California. These conditions have been determined as being necessary to ensure that operation of the facility complies with all applicable local and state air quality rules, regulations and laws. Failure to comply with any of these conditions shall be a violation of District Rule 206, this permit, as well as any applicable section of the California Health & Safety Code.

- D.1 **Permit Activation.** All aspects of this permit are enforceable by the District and the State of California upon the issuance date stamped below. The Part 70 aspects of this permit are not final until:
 - (a) The USEPA has either provided written comments to the District and these comments require no modification to this permit or the USEPA does not provide written comments

Authority to Construct/Permit to Operate 13487

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during their review period. The District will issue a letter stating that this permit is a final Part 70 permit. The effective date that this permit will be considered a final Part 70 permit will be the date stamped on the District's letter.

(b) After the USEPA has provided the District written comments that require a modification to this permit, the District will modify this permit to address the USEPA's comments and issue the Part 70 permit as final. The re-issued permit will supersede this permit in its entirety.

AIR POLLUTION CONTROL OFFICER
DATE

Attachments:

- Tables 5.1 5.3 Permitted Emission Limits
- Table 7.2 Offsets and Emission Reduction Credit Requirements
- Permit Equipment List
- Permit Evaluation for Authority to Construct/Permit to Operate 13487

Notes:

- Reevaluation Due Date: June 12, 2012
- Stationary sources are subject to an annual emission fee (see Fee Schedule B-3 of Rule 210).
- Annual reports are due by March 1st of each year.

 $\label{lem:condition} $$ \cong\Shares\Groups\ENGR\WP\Oil\&Gas\Exxon - SYU\ Project\Permits - LFC\ATC-PTO\ 13487\ATC-PTO\ 13487 - Final\ Permit - 8-8-2011.doc$

Equipment List for Authority to Construct/Permit to Operate 13487

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Monday, June 13, 2011 Santa Barbara County District – Equipment List

ATC/PTO 13487 / FID: 01482 Las Flores Canyon / SSID: 01482

A PERMITTED EQUIPMENT

1 Fugitive HC Components - Valve CLP - Oil Svc. (Access.)

Device ID #	113957	Device Name	Fugitive HC Components - Valve CLP - Oil Svc. (Access.)
Rated Heat Input		Physical Size	32.00 Component Leakpath
Manufacturer		Operator ID	•
Model		Serial Number	
Location Note			
Device			
Description			

2 Fugitive HC Components - Connect. CLPs - Oil Svc. (Access)

Device ID #	113958	Device Name	Fugitive HC Components - Connect. CLPs - Oil Svc. (Access)
Rated Heat Input		Physical Size	245.00 Component Leakpath
Manufacturer		Operator ID	•
Model		Serial Number	
Location Note			
Device			
Description			

Table 5.1-1 Permit Operating Equipment ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct/Permit to Operate 13487

Equipment Item	D	Description			Device	e Specification:	S		Usage	e Data		Maximum Operating Schedule			
		Exxon ID #	APCD DeviceNo	Fuel	HHV	%S	Size	Units	Capacity	Units	Load	hr	day	qtr	yea
ugitive Componen	ts - Gas														
/alve	Accessible		1097				19	comp-lp	_			1	24	2,190	8,7
Valve	Inaccessible		1098	_	_	_	29	comp-lp	_			1	24	2,190	8,7
Valve	Unsafe		7870				48	comp-lp				1	24	2,190	8,7
Valve	Bellows / Background ppmv		6551	_		_	1,744	comp-lp	_			1	24	2,190	8,7
Valve	Category A		6474	_		_	50	comp-lp		_		1	24	2,190	8,7
Valve	Category B		7872			_	187	comp-lp	_			1	24	2,190	8,7
Valve	Category C		104929			_	77	comp-lp	_			1	24	2,190	8.7
Valve	Category E		104926				567	comp-lp				1	24	2,190	8,7
Valve	Category F		9710			_	13	comp-lp				1	24	2,190	8,7
Valve	Category H		1099	_	_	_	532	comp-lp	_			1	24	2,190	8,7
Valve	Category H (Inaccessible)		1100	_		_	37	comp-lp	_	_		1	24	2,190	8,7
Valve	Category I		6475			_	435	comp-lp	_			1	24	2,190	8,7
Connection	Accessible/Inaccessible		1101	_	-	_	9,678	comp-lp	_	_		1	24	2,190	8,7
Connection	Unsafe		6568		-	_	463	comp-lp	-			1	24	2,190	8,7
Connection	Category B		7874	-	_	-	11,100	comp-lp	-			1	24	2,190	8,7
Connection	Category C		104928		-	_	185	comp-lp	-			1	24	2,190	8,7
Connection	Category E		104925	-	_	_	1,719		-	-		1	24	2,190	8,7
			9709	-	-			comp-lp	-			1			
Connection	Category F To VRS			_	-	-	55	comp-lp	-			1	24 24	2,190	8,7
Compressor Seal			6555 6557			-	26	comp-lp	-			•	24	2,190	8,7
	Exempt		6337			sub-total =	5,018 31,982	comp-lp			-	1	24	2,190	8,7
						out total	31,502	comp ap							
Fugitive Componen															
Valve	Accessible		1092	-		-	298	comp-lp	-			1	24	2,190	8,7
Valve	Inaccessible		1093		-	-	6	comp-lp	-			1	24	2,190	8,7
Valve	Bellows / Background ppmv		6558				708	comp-lp				1	24	2,190	8,7
Valve	Category B		7877	-		-	2	comp-lp	-			1	24	2,190	8,7
Valve	Category H		1094				478	comp-lp				1	24	2,190	8,7
Valve	Category H (Inaccessible)		5967			-	18	comp-lp				1	24	2,190	8,7
Connection	Accessible/Inaccessible		1095	-	-	-	6,914	comp-lp	-			1	24	2,190	8,7
Connection	Unsafe		7880			-	1	comp-lp	-			1	24	2,191	8,
Connection	Category B		1096	-		-	108	comp-lp	-	-		1	24	2,190	8,7
Connection	Category F		9711				2	comp-lp	-			1	24	2,190	8,7
Pump Seal	Single		7879				4	comp-lp				1	24	2,190	8,7
Pump Seal	Dual/Tandem		6561				45	comp-lp				1	24	2,190	8,7
	Exempt		6563			-	1,761	comp-lp			-	1	24	2,190	8,7
						sub-total =	10,345	comp-lp							
Solvent Usage															

Table 5.1-2 Equipment Emission Factors ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct/Permit to Operate 13487

Equipment Item		Description				En	nission Fact	ors		
		Exxon ID #	APCD DeviceNo	NOx	ROC	со	SOx	PM	PM10	Units
Fugitive Components -										
Valve	Accessible	OTP/CPP/SGTP/TT	1097		0.0804					lb/day-clp
Valve	Inaccessible	OTP/CPP/SGTP/TT	1098		0.0804					lb/day-clp
Valve	Unsafe	OTP/CPP/SGTP/TT	7870		0.4020					lb/day-clp
Valve	Bellows / Background ppmv	OTP/CPP/SGTP/TT	6551		0.0000			-		lb/day-clp
Valve	Category A	OTP/CPP/SGTP/TT	6474		0.0643					lb/day-clp
Valve	Category B	OTP/CPP/SGTP/TT	7872		0.0603					lb/day-clp
Valve	Category C	OTP/CPP/SGTP/TT	104929		0.0523					lb/day-clp
Valve	Category E	OTP/CPP/SGTP/TT	104926		0.0482					lb/day-clp
Valve	Category F	OTP/CPP/SGTP/TT	9710		0.0402					lb/day-clp
Valve	Category H	OTP/CPP/SGTP/TT	1099		0.0402					lb/day-clp
Valve	Category H (Inaccessible)	OTP/CPP/SGTP/TT	1100		0.0402					lb/day-clp
Valve	Category I	OTP/CPP/SGTP/TT	6475		0.0322					lb/day-clp
Connection	Accessible/Inaccessible	OTP/CPP/SGTP/TT	1101		0.0050					lb/day-clp
Connection	Unsafe	OTP/CPP/SGTP/TT	6568		0.0249					lb/day-clp
Connection	Category B	OTP/CPP/SGTP/TT	7874		0.0037					1b/day-clp
Connection	Category C	OTP/CPP/SGTP/TT	104928		0.0032					lb/day-clp
Connection	Category E	OTP/CPP/SGTP/TT	104925		0.0030					lb/day-clp
Connection	Category F	OTP/CPP/SGTP/TT	9709		0.0025					lb/day-clp
Compressor Seal	To VRS	OTP/CPP/SGTP/TT	6555		0.0000					lb/day-clp
-	Exempt	OTP/CPP/SGTP/TT	6557		0.0000					lb/day-clp
Fugitive Components -	Oa									
Valve	- On Accessible	OTP/CPP/SGTP/TT	1092		0.0020					1b/day-clp
Valve	Inaccessible	OTP/CPP/SGTP/TT	1092		0.0020					lb/day-clp
Valve Valve		OTP/CPP/SGTP/TT	6558		0.0020	-				lb/day-clp
Valve Valve	Bellows / Background ppmv		7877	-	0.0000		-		-	
Valve Valve	Category B	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	1094		0.0213					lb/day-clp
Valve Valve	Category H	OTP/CPP/SGTP/TT	1094 5967		0.0142					lb/day-clp
	Category H (Inaccessible) Accessible/Inaccessible				0.0142					lb/day-clp
Connection		OTP/CPP/SGTP/TT	1095							lb/day-clp
Connection	Unsafe	OTP/CPP/SGTP/TT	7880		0.0042					lb/day-clp
Connection	Category B	OTP/CPP/SGTP/TT	1096	-	0.0006	-	-		-	lb/day-clp
Connection	Category F	OTP/CPP/SGTP/TT	9711		0.0004					lb/day-clp
Pump Seal	Single	OTP/CPP/SGTP/TT	7879		0.1862	-	-	-	-	lb/day-clp
Pump Seal	Dual/Tandem	OTP/CPP/SGTP/TT	6561		0.0279			-		lb/day-clp
	Exempt	OTP/CPP/SGTP/TT	6563	-	0.0000	-	-	-	-	lb/day-clp
Solvent Usage										
-	Cleaning/Degreasing	OTP/CPP/SGTP/TT	5740	- f	nass balan	-	-	-	-	1bs

Table 5.1-3 Short-Term Emissions ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct/Permit to Operate 13487

Valve Ina Valve Un Valve Cat Connection Ac Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components Valve Ac Valve Ina	accessible naccessible naccessible naccessible naccessible naccessible ategory A ategory B ategory E ategory F ategory H (Inaccessible) ategory I accessible/Inaccessible nacfe ategory B ategory B ategory B ategory B ategory B ategory C ategory E ategory E ategory E ategory E ategory E	EXXON ID # OTP/CPP/SGTP/TT	1097 1098 7870 6551 6474 7872 104929 104926 9710 1099 1100 6475 1101 6568 7874 104928 104925	1b/hr	1b/day	0.06 0.10 0.80 0.00 0.13 0.47 0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48	1.53 2.33 19.30 0.00 3.22 11.28 4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53	1b/hr	Ib/day	1b/hr	1b/day	1b/hr	1b/day	lb/hr	1b/day	NE N
Valve Ac Valve Ina Valve Un Valve Cat Connection Cat	accessible naccessible naccessible naccessible naccessible naccessible ategory A ategory B ategory E ategory F ategory H (Inaccessible) ategory I accessible/Inaccessible nacfe ategory B ategory B ategory B ategory B ategory B ategory C ategory E ategory E ategory E ategory E ategory E	OTP/CPP/SGTP/TT	1098 7870 6551 6474 7872 104929 104926 9710 1099 1100 6475 1101 6568 7874			0.10 0.80 0.00 0.13 0.47 0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	2.33 19.30 0.00 3.22 11.28 4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53					-				NE N
Valve Ac Valve Ina Valve Un Valve Cat Connection Cat	accessible naccessible naccessible naccessible naccessible naccessible ategory A ategory B ategory E ategory F ategory H (Inaccessible) ategory I accessible/Inaccessible nacfe ategory B ategory B ategory B ategory B ategory B ategory C ategory E ategory E ategory E ategory E ategory E	OTP/CPP/SGTP/TT	1098 7870 6551 6474 7872 104929 104926 9710 1099 1100 6475 1101 6568 7874			0.10 0.80 0.00 0.13 0.47 0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	2.33 19.30 0.00 3.22 11.28 4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53					-			-	NE
Valve Ina Valve Un Valve Cat Connection Ac Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components Valve Ac Valve Ina	accessible insafe ellows / Background ppmv ategory A ategory B ategory C ategory E ategory F ategory H (Inaccessible) ategory I accessible/Inaccessible insafe ategory B ategory B ategory B ategory C ategory E ategory E ategory B ategory C ategory E ategory E ategory E ategory E	OTP/CPP/SGTP/TT	1098 7870 6551 6474 7872 104929 104926 9710 1099 1100 6475 1101 6568 7874			0.10 0.80 0.00 0.13 0.47 0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	2.33 19.30 0.00 3.22 11.28 4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53				-	-		-	-	NE
Valve Bel Valve Cat Connection Ac Connection Un Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components - ' Valve Ac Valve Ina	ellows / Background ppmv ategory A ategory B ategory C ategory F ategory H ategory H (Inaccessible) ategory I ategory I ategory B ategory B ategory B ategory B ategory B ategory E ategory E ategory E ategory F	OTP/CPP/SGTP/TT	6551 6474 7872 104929 104926 9710 1099 1100 6475 1101 6568 7874			0.80 0.00 0.13 0.47 0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	19.30 0.00 3.22 11.28 4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53		- - - - - - - - -	- - - - - - - - -		-		-		NE
Valve Cat Connection Ac Connection Cat Compressor Seal To Exe Fugitive Components - ' Valve Ac Valve Ina	ategory A ategory B ategory C ategory E ategory F ategory H (Inaccessible) ategory I ategory I ategory I ategory B ategory B ategory B ategory B ategory B ategory E ategory E ategory E	OTP/CPP/SGTP/TT	6474 7872 104929 104926 9710 1099 1100 6475 1101 6568 7874 104928	-	-	0.13 0.47 0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	3.22 11.28 4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53	-	- - - - - - - - - -	- - - - - - - -	-	-	- - - - - - -	-	-	NE NE NE NE NE NE NE NE
Valve Cat Connection Ac Connection Un Connection Cat Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Exe Fugitive Components - ' Valve Valve Ac Valve Ina	ategory A ategory B ategory C ategory E ategory F ategory H (Inaccessible) ategory I ategory I ategory I ategory B ategory B ategory B ategory B ategory B ategory E ategory E ategory E	OTP/CPP/SGTP/TT	7872 104929 104926 9710 1099 1100 6475 1101 6568 7874 104928			0.47 0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	11.28 4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53	-	- - - - - - - -	- - - - - - -	-	-	- - - - - -	- - - - - -	-	NE NE NE NE NE NE NE
Valve Cat Connection Ac Connection Cat Connection Cat Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components - ' Valve Ac Valve Ina	ategory B ategory C ategory E ategory F ategory H ategory H (Inaccessible) ategory I accessible/Inaccessible insafe ategory B ategory B ategory C ategory E ategory F	OTP/CPP/SGTP/TT	104929 104926 9710 1099 1100 6475 1101 6568 7874 104928	-	- - - - - - - -	0.17 1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	4.02 27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53	-	- - - - - - -	- - - - -	- - - - -	-	- - - - - -	- - - - -	- - - - - -	NE NE NE NE NE
Valve Cat Connection Cat Connection Cat Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Exe Valve Ac Valve Ina	ategory C ategory E ategory H ategory H (Inaccessible) ategory I (ccessible/inaccessible insafe ategory B ategory B ategory C ategory E ategory E	OTP/CPP/SGTP/TT	104926 9710 1099 1100 6475 1101 6568 7874 104928	-	- - - - - - -	1.14 0.02 0.89 0.06 0.58 2.01 0.48 1.73	27.35 0.52 21.39 1.49 13.99 48.27 11.55 41.53	-	- - - - - -	- - - - -	- - - -	-	- - - - -	- - - - -	-	NE NE NE NE
Valve Cat Valve Cat Valve Cat Valve Cat Connection Cat Connection Un Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components - Valve Ac Valve Ac Valve Ina	ategory E ategory F ategory H ategory H (Inaccessible) ategory I .ccessible/Inaccessible insafe ategory B ategory C ategory E ategory E	OTP/CPP/SGTP/TT	9710 1099 1100 6475 1101 6568 7874 104928	-	- - - - - -	0.02 0.89 0.06 0.58 2.01 0.48 1.73	0.52 21.39 1.49 13.99 48.27 11.55 41.53	- - - - -	- - - - -	- - - -	- - - -	-	- - - -	- - - -	- - - -	NE NE NE
Valve Cat Valve Cat Valve Cat Valve Cat Connection Ac Connection Cat Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components - ' Valve Ac Valve Ina	ategory F ategory H ategory H (Inaccessible) ategory I .ccessible/Inaccessible insafe ategory B ategory C ategory E ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	1099 1100 6475 1101 6568 7874 104928	-	- - - - -	0.89 0.06 0.58 2.01 0.48 1.73	21.39 1.49 13.99 48.27 11.55 41.53	- - - - -	- - - -	- - - -	- - - -		- - - -	- - - -	- - - -	NE NE NE
Valve Cat Valve Cat Valve Cat Connection Ac Connection Cat Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Exe Fugitive Components - ' Valve Valve Ac Valve Ina	ategory H ategory H (Inaccessible) ategory I ccessible/Inaccessible insafe ategory B ategory C ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	1100 6475 1101 6568 7874 104928	-	- - - - -	0.06 0.58 2.01 0.48 1.73	1.49 13.99 48.27 11.55 41.53	- - - -	- - - -	- - -	- - -	- - -	- - -	- - -	-	NE NE
Valve Cat Valve Cat Connection Ac Connection Un Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Exe Fugitive Components - ' Valve Valve Ac Valve Ina	ategory H (Inaccessible) ategory I .ccessible/Inaccessible insafe ategory B ategory C ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	6475 1101 6568 7874 104928	-	- - - -	0.58 2.01 0.48 1.73	13.99 48.27 11.55 41.53	- - -	- - -		-	-	-	-	-	NE
Valve Cat Connection Ac Connection Un Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components - ' Valve Ac Valve Ina	ategory I ccessible/Inaccessible insafe ategory B ategory C ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	6475 1101 6568 7874 104928	-	- - - -	0.58 2.01 0.48 1.73	13.99 48.27 11.55 41.53	-		-	-	-	-	-	-	NE
Connection Ac Connection Un Connection Cat Connection Cat Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components - ' Valve Ac Valve Ina	accessible/Inaccessible insafe ategory B ategory C ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	6568 7874 104928	-	-	2.01 0.48 1.73	48.27 11.55 41.53	-	-	-	-	-	-	-	-	
Connection Un Connection Ca Connection Ca Connection Ca Connection Ca Compressor Seal To Exe Fugitive Components - ' Valve Ac Valve Ina	nsafe ategory B ategory C ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	6568 7874 104928	-	-	0.48 1.73	11.55 41.53	-	-	_						
Connection Ca Connection Ca Connection Ca Connection Ca Compressor Seal To Exe Fugitive Components - Valve Ac Valve Ac Valve Ina	ategory B ategory C ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	7874 104928	-	-	1.73	41.53	_			_	_	_	_		NE
Connection Cat Connection Cat Compressor Seal To Exe Exe Fugitive Components - Valve Ac Valve Ac Valve Ina	ategory C ategory E ategory F	OTP/CPP/SGTP/TT OTP/CPP/SGTP/TT	104928	-	-				_	_	_	_	_	_	_	NE
Connection Cat Connection Cat Compressor Seal To Exe Fugitive Components - Valve Ac Valve Ina	ategory E ategory F	OTP/CPP/SGTP/TT					0.60	_	_	_	_	_	_	_	_	NE
Connection Cat Compressor Seal To Exe Fugitive Components Valve Ac Valve Ina	ategory F				_	0.21	5.14	_	_	_	_	_	_	_	_	NE
Compressor Seal To Exe Fugitive Components Valve Ac Valve Ina			9709	_		0.01	0.14	_	_	_	_	_	_	_	_	NE
Exe Fugitive Components Valve Ac Valve Ina	o VRS	OTP/CPP/SGTP/TT	6555	_		0.00	0.00		_	_	_	_	_	_	_	NE
Fugitive Components - Valve Ac Valve Ina	xempt	OTP/CPP/SGTP/TT	6557	_		0.00	0.00		_	_	_		_	_	_	NE
Valve Ac Valve Ina		b-Total:				8.90	213.65									FE
Valve Ac Valve Ina	0.1															
Valve Ina	- Oii .ccessible	OTP/CPP/SGTP/TT	1092			0.03	0.61									NE
	naccessible	OTP/CPP/SGTP/TT	1092	-	-	0.00	0.61 0.01	-	-	-	-	-	-	-	-	NE NE
vaive be		OTP/CPP/SGTP/TT	6558	-	-	0.00		-	-	-	-	-	-	-	-	NE NE
	ellows / Background ppmv	OTP/CPP/SGTP/TT	7877	-	-	0.00	0.00	-	-	-	-	-	-	-	-	NE NE
	ategory B	OTP/CPP/SGTP/TT		-	-		0.04	-	-	-	-	-	-	-	-	
	ategory H	OTP/CPP/SGTP/TT	1094 5967	-	-	0.28	6.79	-	-	-	-	-	-	-	-	NE NE
	ategory H (Inaccessible) .ccessible/Inaccessible	OTP/CPP/SGTP/TT	1095	-	-	0.01	0.26 5.85	-	-	-	-	-	-	-	-	NE NE
		OTP/CPP/SGTP/TT	7880	-	-	0.24		-	-	-	-	-	-	-	-	NE NE
	nsafe			-	-		0.00	-	-	-	-	-	-	-	-	
	ategory B	OTP/CPP/SGTP/TT	1096	-	-	0.00	0.07	-	-	-	-	-	-	-	-	NE
	ategory F	OTP/CPP/SGTP/TT	9711	-	-	0.00	0.00	-	-	-	-	-	-	-	-	NE
-	ingle	OTP/CPP/SGTP/TT	7879	-	-	0.03	0.74	-	-	-	-	-	-	-	-	NE
•	ual/Tandem	OTP/CPP/SGTP/TT	6561	-	-	0.05	1.26	-	-	-	-	-	-	-	-	NE
Exe	xempt	OTP/CPP/SGTP/TT	6563		-	0.00	0.00	-	-	-	-	-		-	-	NE TE
	Sul	b-Total:				0.65	15.63									FE
Solvent Usage Cle																

Table 5.1-4 Longt-Term Emissions ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct/Permit to Operate 13487

Equipment Item		Description		NO	Jx	RO	C	C	0	S	Jx	P	M	PM	110	Federal
		Exxon ID #	APCD DeviceNo	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	TPQ	TPY	Enforceabili
Fugitive Componer	nts - Gas															
Valve	Accessible	OTP/CPP/SGTP/TT	1097	_	_	0.07	0.28	_	_	_	_	_	_	_	_	NE
Valve	Inaccessible	OTP/CPP/SGTP/TT	1098	_	_	0.11	0.43	_		-	_	_	_	_	-	NE
Valve	Unsafe	OTP/CPP/SGTP/TT	7870	_	_	0.88	3.52	_	-	_	_	_	_	_	_	NE
Valve	Bellows / Background ppmv	OTP/CPP/SGTP/TT	6551	_	_	0.00	0.00	_	-	-	_	_	-	_	_	NE
Valve	Category A	OTP/CPP/SGTP/TT	6474	-	-	0.15	0.59	_	_	-	_	-	-	-	_	NE
Valve	Category B	OTP/CPP/SGTP/TT	7872	-	_	0.51	2.06	_	-	-	_	_	-	_	_	NE
Valve	Category C	OTP/CPP/SGTP/TT	104929	_	_	0.18	0.73	_	-	_	_	_	_	_	_	NE
Valve	Category E	OTP/CPP/SGTP/TT	104926	-	-	1.25	4.99	-	-	-	_	-	-	-	_	NE
Valve	Category F	OTP/CPP/SGTP/TT	9710	_	_	0.02	0.10	_	-	_	_	_	_	_	_	NE
Valve	Category H	OTP/CPP/SGTP/TT	1099	-	-	0.98	3.90	-	-	-	_	-	-	-	_	NE
Valve	Category H (Inaccessible)	OTP/CPP/SGTP/TT	1100	_	_	0.07	0.27	_	-	_	_	_	_	_	_	NE
Valve	Category I	OTP/CPP/SGTP/TT	6475	-	-	0.64	2.55	-	-	-	_	-	-	-	_	NE
Connection	Accessible/Inaccessible	OTP/CPP/SGTP/TT	1101	_	_	2.20	8.81	_	-	_	_	_	_	_	_	NE
Connection	Unsafe	OTP/CPP/SGTP/TT	6568	-	-	0.53	2.11	-	-	-	_	-	-	-	_	NE
Connection	Category B	OTP/CPP/SGTP/TT	7874	_	_	1.89	7.58	_	-	-	_	_	_	_	_	NE
Connection	Category C	OTP/CPP/SGTP/TT	104928	-	-	0.03	0.11	_	-	-	_	-	-	-	_	NE
Connection	Category E	OTP/CPP/SGTP/TT	104925	_	_	0.23	0.94	_	-	-	_	_	_	_	_	NE
Connection	Category F	OTP/CPP/SGTP/TT	9709	-	-	0.01	0.03	_	_	-	_	-	-	-	_	NE
Compressor Seal	To VRS	OTP/CPP/SGTP/TT	6555	_	_	0.00	0.00	_	-	-	_	_	-	_	_	NE
	Exempt	OTP/CPP/SGTP/TT	6557	-	_	0.00	0.00	_	_	_	_	-	-	_	_	NE
	Sub	b-Total:				9.75	38.99									FE
Fugitive Componer	ste Oil															
Valve	Accessible	OTP/CPP/SGTP/TT	1092			0.03	0.11									NE
Valve	Inaccessible	OTP/CPP/SGTP/TT	1093			0.00	0.00									NE
Valve	Bellows / Background ppmv	OTP/CPP/SGTP/TT	6558			0.00	0.00				_				_	NE
Valve	Category B	OTP/CPP/SGTP/TT	7877			0.00	0.01				_					NE
Valve	Category H	OTP/CPP/SGTP/TT	1094			0.31	1.24				_				_	NE
Valve	Category H (Inaccessible)	OTP/CPP/SGTP/TT	5967	_		0.01	0.05				_	_				NE
Connection	Accessible/Inaccessible	OTP/CPP/SGTP/TT	1095			0.27	1.07				_					NE
Connection	Unsafe	OTP/CPP/SGTP/TT	7880	_	_	0.00	0.00	_	_	_	_	_			_	NE
Connection	Category B	OTP/CPP/SGTP/TT	1096			0.00	0.01									NE
Connection	Category F	OTP/CPP/SGTP/TT	9711	-		0.00	0.00			-		-	-	-		NE NE
Pump Seal	Single	OTP/CPP/SGTP/TT	7879			0.03	0.14			-	-					NE
Pump Seal	Dual/Tandem	OTP/CPP/SGTP/TT	6561			0.05	0.14			-		-	-	-	-	NE
	Exempt	OTP/CPP/SGTP/TT	6563			0.00	0.00									NE
	•	b-Total:				0.71	2.85									FE
Solvent Usage																

Table 5.2: Total Permitted Facility Emissions ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct/Permit to Operate 13487

	NOx	ROC	СО	SOx	PM	PM10
Equipment Category Cogeneration Power Plant	89.87	29.43	182.82	2.05	9.56	7.65
SGTP - Incinerator	1.40	0.05	1.13	6.20	0.96	0.77
Thermal Oxidizer	0.66	0.03	0.56	0.15	0.05	0.05
Internal Combustion Engine	10.94	0.87	2.36	0.00	0.78	0.78
Crew Boats	105.56	3.44	15.53	0.04	6.26	6.01
Supply Boats	116.82	5.39	19.08	0.04	7.29	7.00
Pigging Equipment/Compressor Vents	110.02	0.59	17.00	0.04	1.27	7.00
Tanks/Sumps/Separators		20.86				
Fugitive Components	-	9.55	-	_	-	
Solvent Usage	_	0.69	-	_	_	
Totals (lb/hr)	325.26	70.91	221.49	8.48	24.90	22.26
, ,						
B. Daily						
Equipment Category	NOx	ROC	co	SOx	PM	PM10
Cogeneration Power Plant	620.00	175.57	1,305.05	49.09	229.47	183.58
SGTP - Incinerator	33.71	1.12	27.20	148.80	23.06	18.45
Thermal Oxidizer	15.97	0.88	13.43	3.50	1.22	1.22
Internal Combustion Engine	10.94	0.87	2.36	0.00	0.78	0.78
Crew Boats	633.35	20.63	93.18	0.24	37.55	36.05
Supply Boats	298.62	20.24	58.26	0.11	20.08	19.28
Pigging Equipment/Compressor Vents	-	2.38	-	-	-	
Tanks/Sumps/Separators	-	500.69	-	-	-	
Fugitive Components	-	229.28	-	-	-	
Solvent Usage	-	5.52	-	-	-	
Totals (lb/day)	1,612.59	957.18	1,499.48	201.74	312.17	259.35
C. Quarterly	NO-	DOC	СО	-03	PM	D3 (1)
Equipment Category	NOx	ROC	CO	SOx		
Cogeneration Power Plant	10.22	2 77	10.22			
CCTD Incinerator	18.32	3.77	18.32	2.24	10.47	8.37
	1.54	0.05	1.24	2.24 4.92	10.47 1.05	8.37 0.84
Thermal Oxidizer	1.54 1.74	0.05 0.09	1.24 1.44	2.24 4.92 4.13	10.47 1.05 0.13	8.37 0.84 0.13
Thermal Oxidizer Internal Combustion Engine	1.54 1.74 0.07	0.05 0.09 0.01	1.24 1.44 0.02	2.24 4.92 4.13 0.00	10.47 1.05 0.13 0.01	8.37 0.84 0.13 0.01
Thermal Oxidizer Internal Combustion Engine Crew Boats	1.54 1.74 0.07 2.86	0.05 0.09 0.01 0.19	1.24 1.44 0.02 0.75	2.24 4.92 4.13 0.00 0.00	10.47 1.05 0.13 0.01 0.20	8.37 0.84 0.13 0.01 0.20
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats	1.54 1.74 0.07	0.05 0.09 0.01 0.19 0.10	1.24 1.44 0.02	2.24 4.92 4.13 0.00	10.47 1.05 0.13 0.01	8.37 0.84 0.13 0.01 0.20
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents	1.54 1.74 0.07 2.86	0.05 0.09 0.01 0.19 0.10 0.01	1.24 1.44 0.02 0.75	2.24 4.92 4.13 0.00 0.00	10.47 1.05 0.13 0.01 0.20	8.37 0.84 0.13 0.01 0.20
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators	1.54 1.74 0.07 2.86	0.05 0.09 0.01 0.19 0.10 0.01 1.65	1.24 1.44 0.02 0.75	2.24 4.92 4.13 0.00 0.00	10.47 1.05 0.13 0.01 0.20	8.37 0.84 0.13 0.01 0.20
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumply/Separators Fugitive Components	1.54 1.74 0.07 2.86	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46	1.24 1.44 0.02 0.75	2.24 4.92 4.13 0.00 0.00	10.47 1.05 0.13 0.01 0.20	8.37 0.84 0.13 0.01 0.20
SGTP - Incinerator Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage	1.54 1.74 0.07 2.86 1.79	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25	1.24 1.44 0.02 0.75 0.39	2.24 4.92 4.13 0.00 0.00 0.00	10.47 1.05 0.13 0.01 0.20 0.15	8.37 0.84 0.13 0.01 0.20 0.15
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumpl/Separators Fugitive Components	1.54 1.74 0.07 2.86	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46	1.24 1.44 0.02 0.75	2.24 4.92 4.13 0.00 0.00	10.47 1.05 0.13 0.01 0.20	8.37 0.84 0.13 0.01 0.20
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual	1.54 1.74 0.07 2.86 1.79	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39	2.24 4.92 4.13 0.00 0.00 0.00 	10.47 1.05 0.13 0.01 0.20 0.15	8.37 0.84 0.13 0.01 0.20 0.15
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category	1.54 1.74 0.07 2.86 1.79	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39	2.24 4.92 4.13 0.00 0.00 0.00 - - - 11.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01	8.37 0.84 0.13 0.01 0.20 0.15
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant	1.54 1.74 0.07 2.86 1.79 - - - 26.31	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87	0.84 0.13 0.01 0.20 0.15 9.69
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator	1.54 1.74 0.07 2.86 1.79 - - - - 26.31	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 111.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PMI(33.50 3.37
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator Thermal Oxidizer	1.54 1.74 0.07 2.86 1.79 26.31	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 - - - 22.16	2.24 4.92 4.13 0.00 0.00 0.00 11.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PM10 33.50 3.37 0.40
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator Thermal Oxidizer Internal Combustion Engine	1.54 1.74 0.07 2.86 1.79 26.31 NOX 73.07 6.15 5.24 0.26	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40 0.02	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PMI(33.50 3.37 0.40 0.02
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator Thermal Oxidizer Internal Combustion Engine Crew Boats	1.54 1.74 0.07 2.86 1.79 	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 10.00 11.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40 0.02 0.82	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PMII 33.50 3.37 0.40 0.02 0.79
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator Thermal Oxidizer Internal Combustion Engine Crew Boats	1.54 1.74 0.07 2.86 1.79 26.31 NOX 73.07 6.15 5.24 0.26	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40 0.02	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PMII 33.50 3.37 0.40 0.02 0.79
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats	1.54 1.74 0.07 2.86 1.79 	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 10.00 11.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40 0.02 0.82	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PMII 33.50 3.37 0.40 0.02 0.79
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents	1.54 1.74 0.07 2.86 1.79 	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58 ROC 14.99 0.21 0.29 0.02 0.74 0.10	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 10.00 11.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40 0.02 0.82	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PMII 33.50 3.37 0.40 0.02 0.79
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category Cogeneration Power Plant SGTP - Incinerator Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators	1.54 1.74 0.07 2.86 1.79 	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 10.00 11.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40 0.02 0.82	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PM10 33.50 3.37 0.40 0.02 0.79
Thermal Oxidizer Internal Combustion Engine Crew Boats Supply Boats Pigging Equipment/Compressor Vents Tanks/Sumps/Separators Fugitive Components Solvent Usage Totals (TPQ) D. Annual Equipment Category	1.54 1.74 0.07 2.86 1.79 	0.05 0.09 0.01 0.19 0.10 0.01 1.65 10.46 0.25 16.58 ROC 14.99 0.21 0.29 0.02 0.74 0.10 0.03 6.30	1.24 1.44 0.02 0.75 0.39 	2.24 4.92 4.13 0.00 0.00 0.00 10.00 11.29	10.47 1.05 0.13 0.01 0.20 0.15 12.01 PM 41.87 4.21 0.40 0.02 0.82	8.37 0.84 0.13 0.01 0.20 0.15 9.69 PM10 33.50 3.37 0.40

Table 5.3: Federal Potential To Emit ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct/Permit to Operate 13487

Aut	hority to Construct/Pe	ermit to Oper	rate 13487			
A. Hourly						
Equipment Category	NOx	ROC	CO	SOx	PM	PM10
Cogeneration Power Plant	89.87	29.43	182.82	2.05	9.56	7.65
SGTP - Incinerator	1.40	0.05	1.13	6.20	0.96	0.77
Thermal Oxidizer	0.66	0.04	0.56	0.15	0.05	0.05
Crew Boats	105.56	3.44	15.53	0.04	6.26	6.01
Supply Boats	116.82	5.39	19.08	0.04	7.29	7.00
Pigging Equipment/Compressor Vents	-	0.59	-	-	-	-
Tanks/Sumps/Separators	-	20.86	-	-	-	-
Fugitive Components	-	9.55	-	-	-	-
Solvent Usage	-	0.69	-	-	-	-
Totals (lb/hr)	314.31	70.04	219.13	8.47	24.13	21.48
B. Daily						
Equipment Category	NOx	ROC	СО	SOx	PM	PM10
Cogeneration Power Plant	620.00	175.57	1,305.05	49.09	229.47	183.58
SGTP - Incinerator	33.71	1.12	27.20	148.80	23.06	18.45
Thermal Oxidizer	15.97	0.88	13.43	3.50	1.22	1.22
Crew Boats	633.35	20.63	93.18	0.24	37.55	36.05
Supply Boats	298.62	20.03	58.26	0.24	20.08	19.28
***	298.02	2.38	38.20	0.11	20.08	19.28
Pigging Equipment/Compressor Vents	-	500.69	-	-	-	-
Tanks/Sumps/Separators	-		-	-	-	-
Fugitive Components	-	229.28 5.52	-	-	-	-
Solvent Usage Totals (lb/day)	1,601.65	956.31	1,497.12	201.74	311.39	258.58
	ŕ					
C. Quarterly	NO	ROC	CO	°0	DM.	D3.f10
Equipment Category Cogeneration Power Plant	NOx 18.32	3.77	18.32	2.24	PM 10.47	PM10 8.37
SGTP - Incinerator	1.54	0.05	1.24	4.92	1.05	0.84
Thermal Oxidizer	1.74	0.03	1.44	4.13	0.13	0.84
Crew Boats	2.86	0.09	0.75	0.00	0.13	0.13
Supply Boats	1.79	0.19	0.73	0.00	0.20	0.20
Pigging Equipment/Compressor Vents	1.79	0.10	0.39	0.00	0.15	0.13
Tanks/Sumps/Separators	-	1.65	-	-	-	-
	-	10.46	-	-	-	-
Fugitive Components	-		-	-	-	-
Solvent Usage Totals (TPQ)	26.24	0.25 16.57	22.15	11.29	12.01	9.69
D. Annual	310	Por				Da es a
Equipment Category	NOx	ROC	CO 70.70	SOx	PM	PM10
Cogeneration Power Plant	73.07	14.99	72.79	8.95	41.87	33.50
SGTP - Incinerator	6.15	0.21	4.96	19.70	4.21	3.37
Thermal Oxidizer	5.24	0.29	4.39	10.85	0.40	0.40
Crew Boats	11.43	0.74	3.01	0.01	0.82	0.79
Supply Boats	1.79	0.10	0.39	0.00	0.15	0.15
Pigging Equipment/Compressor Vents	-	0.03	-	-	-	-

6.30 41.84

1.00

65.51

85.54

39.51

47.45

38.19

97.68

Tanks/Sumps/Separators

Totals (TPY)

Fugitive Components Solvent Usage

TABLE A.1 - Facility Emissions Summary ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct/Permit to Operate 13487

I. This Projects "I" NEI-90

Permit	Date	NOx		ROC		CO		SOx		PM		PM10	
No.	Issued	lb/day	ton/yr										
ATC/PTO 13487				2.72	0.05								

II. This Facility's "P1s"

Enter all facility "P1" NEI-90s below:

Permit	Date	NO	Ox	RC	C	C	0	SC	Σ	P	M	PM	I10
No.	Issued	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
PTO 5651	1/11/2000	1,003.14	98.56	877.74	68.83	546.68	87.00	228.92	40.67	288.75	47.78	236.82	38.52
ATC/PTO 10990	5/1/2003			3.07	3.80							i	
ATC/PTO 11322	1/4/2005	5.79	1.06	0.32	0.06	4.87	0.89	20.39	3.72	0.44	0.08	0.44	0.08
ATC/PTO 13039	6/11/2009	0.00	0.00	0.31	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ATC/PTO 13545	8/1/2011	78.15	0.31	43.49	0.17	593.26	2.37	0.00	0.00	0.00	0.00	0.00	0.00
Totals		1087.08	99,93	924.93	72.92	1144.81	90.26	249.31	44.39	289.19	47.86	237.26	38.60

Notes:

- (1) Facility NEI from IDS.
- (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
- (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

III. This Facility's "P2" NEI-90 Decreases

Enter all facility "P2" NEI-90s below:

Permit	Date	N	Ox	RO	OC	C	O.	S	Эx	P	M	PM	1 10
No.	Issued	lb/day	ton/yr										
ATC/PTO 11410	3/7/2005			4.335	0.791								
ATC/PTO 11170	4/2/2004			10.703	1.953							i	
Part 70 PTO 5651-01	12/1/2003		1.041		0.00		0.252		0.130		0.129		0.124
Totals		0.00	1.04	15.04	2.74	0.00	0.25	0.00	0.13	0.00	0.13	0.00	0.12

Notes:

- (1) Facility NEI from IDS.
- (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
- (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

IV. This Facility's Pre-90 "D" Decreases

Enter all facility "D" decreases below:

Permit	Date	N	Ox	RO	C	C	О	S	Ox	P	M	PM	I 10
No.	Issued	lb/day	ton/yr										
Totals		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

- (1) Facility "D" from IDS.
- (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
- (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

V. Calculated This Facility's NEI-90

Table below summarizes facility NEI-90 as equal to: I+ (P1-P2) -D

	N	Ox	RO	OC	C	0	SC	Ox	P	M	PM	10
Term	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr	lb/day	ton/yr
Project "I"	0.00	0.00	2.72	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
P1	1087.08	99.93	924.93	72.92	1144.81	90.26	249.31	44.39	289.19	47.86	237.26	38.60
P2	0.00	1.04	15.04	2.74	0.00	0.25	0.00	0.13	0.00	0.13	0.00	0.12
D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENEL-90	1087 08	98 89	912.61	70.23	1144 81	90.01	249 31	44 26	289 19	47 73	237.26	38 48

- (1) Resultant FNEI-90 from above Section I thru IV data.
- (2) Totals only apply to permits for this facility ID. Totals may not appear correct due to rounding.
- (3) Because of rounding, values in this table shown as 0.00 are less than 0.005, but greater than zero.

Table 7.2 ROC Emission Offset Requirements ExxonMobil Las Flores Canyon Oil and Gas Plant Part 70/ APCD Authority to Construct/Permit to Operate 13487

Reactive Organic Compounds (ROC)

NEI EMISSIONS FROM PROJECT	Reactive Organic (Compounds
	TPQ	TPY
Las Flores Canyon (a)	17.38	68.83
Phase III Oil	0.44	1.75
Phase III Wastewater	0.09	0.34
De Minimis Transfer	0.140	0.560
De Minimis Transfer - ATC 13039	0.014	0.056
Cogen Power Plant M&T	0.043	0.174
De Minimis Transfer - ATC/PTO 13487	0.012	0.048
Total NEI:	18.11	71.76

EMISSION REDUCTION SOURCES (NEI)	Emission R	eductions	Distance	Offset	Credit
			Factor (b)		
	TPQ	TPY		TPQ	TPY
1. OS&T Shutdown ^(c)	1.25	5.00	1.2	1.04	4.17
2. Carpinteria Gas Plant Fugitive I&M	12.25	49.00	2.6	4.71	18.85
3. Platform Hilda Fugitive I&M	8.75	35.00	2.2	3.98	15.91
4. Platform Heidi Fugitive I&M	3.25	13.00	2.6	1.25	5.00
5. Platform Hazel Fugitive I&M	7.75	31.00	2.2	3.52	14.09
6. Hondo Crew Boat Reductions	0.75	3.00	1.2	0.63	2.50
7. ARCO Seep Containment Project (partial)	3.75	15.00	1.2	3.13	12.50
8. Utility Displacement Credit	0.25	1.00	1.0	0.25	1.00
9. ERC Certificates: McGhan Shutdowns (d)	0.6090	2.4360	1.5	0.4060	1.6240
10. ERC Certificates: Bioenterics Shutdowns (e)	0.6570	2.6280	1.5	0.4380	1.7520
11. ERC Certificate: Grefco Shutdown (f)	0.6400	2.5600	6.0	0.1067	0.4267
12. ERC Certificate 0128-1009: LFC Fugitive I&M	0.0170	0.0680	1.2	0.0142	0.0567
13. ERC Certificate 0235-0811 M/V Broadbill repower ^(h)	0.052	0.209	1.2	0.044	0.174
14. ERC Certificate 0235-0811 ⁱ	0.015	0.0576	1.2	0.012	0.048
Total Offsets: ^(g)	39.99	159.96		19.52	78.09

 $^{^{(}a)}$ See Section 5 of pt70 PTO 5651 R4 for a detailed listing of SYU Project emissions due to operation.

⁽b) Ratios set according to District Guidelines and based on source distance from the SYU project. The discounted offset values shown are the undiscounted offset values divided by the discount ratio.

⁽c) OS&T shutdown emissions to be used to offset crew boat emissions within the District only (remaining ERCs may only be applied to non-NEI OCS liability). Total of 2.93 tpy used for Hondo Topsides Integration Project (Ref: PTO 9100).

⁽d) ERCs generated due the shutdown of McGhan Medical Corporation's Carpinteria and Lompoc facilities: #0079 and #0080.

⁽e) ERC Certificate #0081 is for ERCs generated due the shutdown of BioEnterics Corporation facility at 1035 Cindy Lane in Carpinteria.

 $^{^{(}f)} \ \ ERC\ Certificate\ \#0083\ is\ for\ ERCs\ generated\ due\ the\ shutdown\ of\ Grefco's\ Lompoc\ diatomaceous\ earth\ processing\ plant.$

⁽g) Amount of NEI ERCs provided exceed NEI liability. Excess may not be used for new or modified projects. New or modified projects require ERCs from the Source Register per Regulation VIII.

 $^{^{\}rm (h)}$ Nox ERCs used as ROC offsets at a one-to-one ratio.

 $^{^{\}rm (i)}~$ ERC Certificate 0235-0811 is for ERCs generated from the M/V Broadbill repower.

Table 7.5 ESE Project Operation Emissions and Offsets ExxonMobil Las Flores Canyon Oil and Gas Plant Authority to Construct ATC 13487

Entire Source Emissions

ESE EMISSIONS FROM PROJECT	NOx (a)	ROC
	TPY	TPY
Santa Ynez Expanison Project (b)	370.19	201.23
De Minimis Transfer		3.803
De Minimis Transfer - 2009		0.560
De Minimis Transfer - ATC 13039		0.056
Cogen Power Plant M&T		0.174
De Minimis Transfer - ATC/PTO 13487		0.048
Total	370.19	205.87

EMISSION REDUCTION SOURCES (ESE)	NOx ^(a)	ROC
1. OS&T Shutdown	308.00	147.00
2. Hondo Turbine Reductions	14.00	
3. Hondo and OS&T Supply Boat Reductions (c)	0.00	2.00
4. Hondo Crew Boat Reductions	56.00	7.00
Carpinteria Gas Plant Cooper/Ingersoll Rand Compressors Exxon's Portion (IR) ARCO's Portion (Cooper)	29.00 96.00	
6. Utility Displacement Credit	16.00	1.00
7. Platform Hilda Fugitive I&M		35.00
8. Platform Hope Cooper Compressor (partial)	32	
9. Platform Heidi Fugitive I&M		13.00
10. Platform Hazel Fugitive I&M	-	31.00
11. Carpinteria Gas Plant Fugitive I&M		49.00
12. Shell Molino Waukesha/White Compressors	20.00	
13. ARCO Seep Containment Project (partial)		15.00
14. ERC Certificates: McGhan Shutdowns		2.436
15. ERC Certificates: Bioenterics Shutdowns		2.628
16. ERC Certificate: Grefco Shutdown		2.560
17. ERC Certificate: LFC Fugitive I&M		0.068
18. ERC Certificate 0235-0811 M/V Broadbill Repower ^(f)		0.209
19. ERC Certificate 0235-0811 M/V Broadbill Repower ^(g)		0.0576
Total ESE Offsets:	571.00	307.96
Disposition of Excess ESE Offsets:(d)	108.00	146.93
Excess/Shortfall ESE ERC Offsets:	92.81	-48.16
Excess ESE Offsets remaining due to IP Tra Nox for ROC at ratio 1.927:	nde of 0.00	0.00
New Excess ESE Offsets: (e)	0.00	3.318
New facess Ede Offsets:	0.00	3.318

⁽a) NO_x as NO₂

 $^{^{(}b)}\,\,$ See Section 5 for a detailed listing of SYU Project emissions due to operation.

⁽c) Reductions of NOx from the supply boats did not occur.

⁽d) Excess ESE Offsets at time of the initial Part 70 Permit to Operate/APCD Permit to Operate (2000) were applied to several projects as described in Table 7.6 of the Part 70 PTO 5651/PTO 5651 issued in 2000.

⁽e) Amount of ESE ERCs provided exceed ESE liability. Excess ESE ERC distribution per Table 7.6. New or modified projects require ERCs from the Source Register per Regulation VIII.

⁽f) NOx ERCs used as ROC offsets at a one to one ratio.

 $^{^{(}g)}\;\;$ ERCs generated from repowering of the M/V Broadbill.



PERMIT EVALUATION FOR AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE 13487

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1.0 BACKGROUND

- 1.1 <u>General</u>: Project modifications have occurred at the Las Flores Canyon facility for which the emissions associated with fugitive emission components have qualified as deminimis. This permit action incorporates all the existing fugitive emission component leak paths (clps) currently categorized as deminimis at LFC, into the total fugitive clp count currently permitted at this facility.
- 1.2 <u>Permit History</u>: The facility is comprised of an oil plant, a stripping gas plant, an NGL/LPG loading facility, a cogeneration power plant and a pipeline transportation terminal. See PTO 5651-R4 for a brief description of all permit modifications that have been issued.

2.0 ENGINEERING ANALYSIS

- 2.1 <u>Equipment/Processes</u>: The additional clps subject to this permit action consist of 32 valve clps (oil service) and 245 connection clps (oil service). These clps represent the total number of deminimis fugitive emission clps currently inventoried at the LFC. Following issuance of this permit, there will be no deminimis clps at the LFC.
- 2.2 <u>Emission Controls</u>: There are no emission controls associated with this permit action.
- 2.3 Emission Factors: Emission factors are documented in Table 5.2 of this permit.
- 2.4 <u>Reasonable Worst Case Emission Scenario</u>: Worst case emissions are based on facility operations 24 hours/day, 365 days/year.
- 2.5 <u>Emission Calculations</u>: The total emission increase from the additional clps is 0.272 lb/day ROC and 0.012 tpq ROC. Detailed emission calculation spreadsheets are provided in Tables 5.1 through 5.3. The additional clps have been included in these tables.
- 2.6 <u>Special Calculations</u>: There are no special calculations.
- 2.7 BACT Analyses: Best Available Control Technology was not required for this project.

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- 2.8 <u>Enforceable Operational Limits</u>: The enforceable operating limits are listed in permit condition 9.C.3(b) of this permit.
- 2.9 <u>Monitoring Requirements</u>: Monitoring of fugitive emissions is required per condition 9.C.3(c) of this permit.
- 2.10 <u>Recordkeeping and Reporting Requirements</u>: Recordkeeping and reporting is required per condition 9.C.3(d) and 9.C.3(e) of this permit.

3.0 REEVALUATION REVIEW (not applicable)

4.0 REGULATORY REVIEW

- 4.1 <u>Partial List of Applicable Rules</u>: This project is anticipated to operate in compliance with the following rules:
 - Rule 101. Compliance of Existing Facilities
 - Rule 201. Permits Required
 - Rule 202. Exemptions to Rule 201
 - Rule 205. Standards for Granting Permits
 - Rule 302. Visible Emissions
 - Rule 303. Nuisance
 - Rule 309. Specific Contaminants
 - Rule 331. Fugitive Emissions Inspection and Maintenance
 - Rule 505. Breakdown Procedures
 - Rule 801. New Source Review
 - Rule 802. Nonattainment Review
 - Rule 803. Prevention of Significant Deterioration
- 4.2 Rules Requiring Review: None.
- 4.3 <u>NEI Calculations</u>: The net emission increase calculation is used to determine whether new source review (NSR) requirements must be applied to a project (e.g., offsets, AQIA, PSD BACT). The emissions associated with this permit action constitute NEI. The appropriate NSR requirements have been applied as discussed in this engineering evaluation. See Table A.1 for a facility NEI summary.

5.0 AQIA

This permit action is not subject to the Air Quality Impact Analysis requirements of Regulation VIII.

6.0 OFFSETS/ERCs

6.1 Offsets: The emissions associated with this permit action do not exceed the offset thresholds of Rule 802, however, the Exxon SYU Project stationary source exceeds these offset thresholds for

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NO_x, ROC, PM, PM₁₀ and SO₂. Thus, the ROC emissions associated with this permit action are required to be offset. Emission Reduction Credit certificate 0235-0811 was used to provide reductions at a 1.2 to 1 offset ratio, as documented in Table 7.2.

6.2 ERCs: This project does not generate emission reduction credits.

7.0 AIR TOXICS

An air toxics health risk assessment was not performed for this permitting action.

8.0 CEQA / LEAD AGENCY

The District is the lead agency for CEQA for this project. This project is a minor modification of an existing facility involving no expansion of use beyond that previously existing, therefore this project is exempt from CEQA pursuant to Appendix A of the District's CEQA guidelines.

9.0 SCHOOL NOTIFICATION

A school notice pursuant to the requirements of H&SC §42301.6 was not required.

10.0 PUBLIC and AGENCY NOTFICATION PROCESS/COMMENTS ON DRAFT PERMIT

This permit was not subject to the public notice requirements of Rule 802 and 803. There were no comments on the draft permit.

11.0 FEE DETERMINATION

Fees for this permit are assessed under the cost reimbursement provisions of Rule 210.

12.0 RECOMMENDATION

It is recommended that this permit be granted with the conditions as specified in the permit.

J. Menno	August 2011		August 2011
AQ Engineer	Date	Supervisor	Date

13.0 ATTACHMENTS

IDS Tables

PERMIT POTENTIAL TO EMIT

	NO _x	ROC	CO	SO_x	PM	PM_{10}
lb/day		0.272				
lb/hr		0.011				
TPQ		0.012				
TPY		0.048				

FACILITY POTENTIAL TO EMIT

	NO_x	ROC	CO	SO_x	PM	PM_{10}
lb/day	1,387.64	860.90	602.43	247.59	312.17	259.35
lb/hr	325.26	70.89	221.49	19.58	24.83	22.20
TPQ	26.47	16.42	22.40	11.65	12.07	9.76
TPY	98.84	64.98	87.12	40.58	47.75	38.49

FACILITY NEI90

	NO_x	ROC	CO	SO_x	PM	PM_{10}
lb/day	1,008.93	866.09	551.55	249.31	289.19	237.26
lb/hr						
TPQ						
TPY	98.58	69.95	87.64	44.26	47.73	38.48

- (1) Emissions in these tables are from IDS.
- (2) Because of rounding, values in these tables shown as 0.00 are less than 0.005, but greater than zero.